

## Sec. 4.43. Measure-Containers

### A. Application

**A.1.** - This code applies to measure-containers, including lids or closures if such are necessary to provide total enclosure of the measured commodity, as follows:

- (a) Retail measure-containers intended to be used only once to determine at the time of retail sale, and from bulk supply, the quantity of commodity on the basis of liquid measure. The retail measure-container serves as the container for the delivery of the commodity.
- (b) Prepackaged measure-containers intended to be used only once to determine in advance of sale the quantity of a commodity (such as ice cream, ice milk, or sherbet) on the basis of liquid measure. The prepackaged measure-container serves as the container for the delivery of the commodity, in either a wholesale or a retail marketing unit.

**A.2.** - This code does not apply to rigid containers used for milk, cream, or other fluid dairy products, which are covered by packaging requirements.

**A.3.** - See also Sec. 1.10; General Code requirements.

### S. Specifications

**S.1. Units.** - The capacity of a measure-container shall be a multiple of or a binary submultiple of a quart or a liter, and the measure shall not be subdivided. However, for prepackaged measure-containers, any capacity less than 1/4 L or 1/2 liquid pint shall be permitted. (Amended 1979)

**S.2. Capacity Point.** - The capacity of a measure-container shall be sharply defined by:

- (a) the top edge,
- (b) a line near the top edge, or
- (c) the horizontal cross-sectional plane established by the bottom surface of the removable lid or cap when seated in the container.

**S.3. Shape.** - A measure-container shall be designed as some suitable geometrical shape, and its capacity shall be determined without distortion from its normal assembled shape.

### S.4. Marking.

**S.4.1. Capacity Point.** - If the capacity point of a measure-container is defined by a line, the container shall be marked conspicuously on its side with a suitable statement clearly identifying this line as the capacity point.

**S.4.2. Capacity Statement.** - A measure-container shall be clearly and conspicuously marked with a statement of its capacity in terms of one of the units prescribed in S.1.

### N. Notes

**N.1. Test Liquid.** - Water shall be used as the test liquid for a measure-container.

### N.2. Preparation of Container for Test.

**N.2.1. General.** - Before an actual test is begun, a measure-container shall, if necessary, be so restrained that it will maintain its normal assembled shape and that its sides will not bulge when it is filled with water.

### N.2.2. Restraining Form for Test.

**N.2.2.1. For Rectangular Containers of One Liter, One Quarter Less.** - Bulging of the sides of a rectangular measure-container of 1-liter (1-quart) capacity or less may be controlled by holding against each side of the container, with a cord, rubber bands, or tape, a metal plate or a piece of heavy cardboard slightly smaller than the side of the container. (Amended 1979)

**N.2.2.2. For Rectangular Prepackaged Measure--container of Two Quarts or Two Liters or Greater.**

- A rectangular prepackaged measure-container of 2-liter (2-quart) capacity or greater shall be supported during a test by a rigid restraining form. This form shall restrain not less than the entire area of the central two-thirds of each side of the container, measured from bottom to top. The inside width dimension of any side panel of the restraining form shall be 1.6 mm (1/16 in) greater than the corresponding outside dimension of the container. (The outside width dimension of any side panel of the container shall be established by adding to the inner side center-of-score to center-of-score dimension two thicknesses of the board used, and the sum thus obtained shall be rounded off to the nearest 0.4 mm (1/64 in). (Amended 1979)

**T. Tolerances**

**T.1. Tolerances on an Individual Measure.** - The acceptance tolerances in excess and in deficiency on an individual measure shall be as shown in Table 1.

**T.2. Tolerance on Average Capacity.** - The average capacity on a random sample of ten measures selected from a lot of 25 or more shall be equal to or greater than the nominal capacity. (Amended 1979)

**UR. User Requirements**

**UR.1. Limitation of Use.** - The use of a measure-container with a rectangular cross section of a capacity of 2 L (2 qt) or greater shall be limited to the packaging, in advance of sale, of ice cream, sherbet, or other similar frozen desserts. (Amended 1979)

| <b>Table 1.<br/>Acceptance Tolerances,<br/>in Excess and in Deficiency, for Measure-Containers</b> |                                 |                                 |                                  |                                  |
|--|---------------------------------|---------------------------------|----------------------------------|----------------------------------|
| Nominal Capacity   | Tolerance                       |                                 |                                  |                                  |
|  | In excess                       |                                 | In deficiency                    |                                  |
|  | milliliters                     |                                 | milliliters                      |                                  |
| 1/4 liter or less  | 10                              |                                 | 5.0                              |                                  |
| 1/2 liter  | 15                              |                                 | 7.5                              |                                  |
| 1 liter  | 20                              |                                 | 10.0                             |                                  |
| Over 1 liter   | Add per liter<br>10 milliliters |                                 | Add per liter<br>5.0 milliliters |                                  |
|  | fluid drams                     | cubic inches                    | fluid drams                      | cubic inches                     |
| 1/2 pint or less   | 3                               | 0.6                             | 1.5                              | 0.3                              |
| 1 pint   | 4                               | 1.0                             | 2.0                              | 0.5                              |
| 1 quart  | 6                               | 1.4                             | 3.0                              | 0.7                              |
| 2 quarts   | 9                               | 2.0                             | 4.5                              | 1.0                              |
| 3 quarts   | 10                              | 2.4                             | 5.0                              | 1.2                              |
| 4 quarts   | 12                              | 2.8                             | 6.0                              | 1.2                              |
| Over 4 quarts  | Add per quart 3<br>fluid drams  | Add per quart<br>0.7 cubic inch | Add per quart<br>1.5 fluid drams | Add per quart<br>0.35 cubic inch |